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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,208	11/04/2003	Kenji Uchiyama	9319S-75/DVA	5177
27572	7590	10/20/2006	EXAMINER	
HARNES, DICKEY & PIERCE, P.L.C.			AHMED, SHEEBA	
P.O. BOX 828			ART UNIT	PAPER NUMBER
BLOOMFIELD HILLS, MI 48303			1773	

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,208

Applicant(s)

UCHIYAMA, KENJI

Examiner

Sheeba Ahmed

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/21/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Amendments to claims 1, 6, and 7 have been entered in the above-identified application. Claims 2, 3, and 8-11 are cancelled. **Claims 1 and 4-7 are pending.**

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites that a first adhesive layer includes "a plurality of electrically conductive particles disposed therein all adjacent a surface of the first adhesive layer". Claim 6 further states that "the conductive particles are aligned at the interface within the conductive adhesive agent". It is unclear what is meant by such recitations. Are all the particles located adjacent the interface of the first and second adhesive layers? What is meant by "aligned at the interface"? Claim 6 still does not positively recite the first and second terminals and simply states that the anisotropic conductive adhesive agent is used for electrically connecting first terminals and second terminals.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tajima (US 4,425,382).

Tajima discloses forming a first layer of a first adhesive and substantially insulating material on the surface of a conductive support, depositing particles of an electrically conductive material on the surface of said first layer before said first material is hardened, and forming a second layer of a second adhesive and substantially insulating material on the particle deposited surface of said first layer such that the conductive particles become completely embedded. As a result the particles are firmly held in the adhesive layer (Column 2, lines 39-61). The second adhesive material is the preferably the same as the first adhesive material because adhesiveness of the particles may be enhanced.

Tajima do not specifically teach that the second adhesive layer is thicker than the first adhesive layer and that the first adhesive layer is thicker than the width of the conductive particles.

However, it would have been obvious to one having ordinary skill in the art to optimize the thickness of the two adhesive layer given that thicknesses of adhesive layers can be varied to obtain the desired adhesive properties.

Response to Arguments

4. Applicant's arguments, with regards to the rejection of claims 1 and 4-7 under 35 U.S.C. 103(a) as being unpatentable over Tajima (US 4,425,382), filed on July 21, 2006 have been fully considered but they are not persuasive.

Applicants traverse the above rejection and point to Column 5, lines 27-31 of Tajima as teaching that at least some of the embedded conductive particles **6a** are exposed at the ground surface and hence, the Applicants argue, Tajima does not teach or suggest that the conductive particles are included only within the first adhesive layer as required by claims 1 and 7. However, the Examiner disagrees with the Applicants interpretation of Tajima. Column 5, lines 27-35 state that "Upon formation of the second adhesive layer 9, it is allowed to harden completely, and then the resulting structure is ground to make its outer surface smooth and at the same time have at least some of the embedded conductive particles 6a exposed at the ground surface, as shown in FIG. 2e. Since the grinding is carried out from the outer peripheral surface, the embedded particles 6a are also ground partly when exposed at the outer surface so that the finished surface provides an extremely smooth surface without irregularities". Figure 2e of Tajima clearly shows that the conductive particles are included only within the first adhesive layer. Hence, the above rejection of maintained.

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Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (571)272-1504. The examiner can normally be reached on Monday-Friday from 6am to 2pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571)272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sheeba Ahmed
Art Unit 1773
October 14, 2006